CLAIMS:

What is claimed is:

1   1.   In a data processing network having a server with multiple
2   partitions, a fabric, and a channel adapter communicating between
3   the partitions and the fabric wherein each partition has an
4   assigned address, a method of non-disruptively removing an
5   assigned address comprising:
6   sending a logout command from the channel adapter to the
7   fabric, the logout command including an address to be removed;
8   checking the address to be removed with a table of active
9   addresses to determine if the address to be removed is an active
10   address;
11   changing the status of the address to be removed from active
12   to inactive; and
13   sending an accept response from the fabric to the channel
14   adapter indicating that the address to be removed has been
15   removed.

1   2.   The method of claim 1 wherein the said table associates a
2   partition identification with the address to be removed, said
3   method further comprising;
4   including a partition identification in said logout command;
5   checking the partition identification from said logout
6   command with the partition identification in said table
7   associated with the address to be removed; and
8   sending said accept response only when both the address and
9   the partition identification in the logout command match with the
10   address and associated partition identification in said table.

1   3.   The method of claim 1 wherein said logout command includes
2   an address of the source of the logout command, and the address
3   to be removed is the same as the source address of the logout
4   command.

1   4.   A method for non-disruptively removing one of multiple
2   addresses assigned to a channel adapter, said method comprising:
3   sending from the channel adapter to a fabric a logout
4   command requesting the fabric to unassign a given address; and
5   receiving from said fabric, a response indicating the
6   requested address is unassigned, said channel adapter detecting
7   an error if the response does not indicate the requested address
8   was successfully removed.

1   5.   The method of claim 4 wherein the logout command includes a
2   source address of a partition making the request, and the source
3   address is the address being requested to be removed.

1   6.   A method for non-disruptively removing one of multiple
2   addresses registered in a fabric, said method comprising:
3   receiving by the fabric from a channel adapter, a logout
4   command requesting the fabric to unassign a given address to be
5   removed;
6   locating the address to be removed among the addresses
7   registered in the fabric;
8   changing in the fabric, the status of the address to be
9   removed from active to unassigned; and
10   sending an accept from the fabric to the channel adapter
11 indicating the requested address to be removed has been
12 unassigned.

1   7.   The method of claim 6 wherein the logout command includes an
2   identification of a partition having the address to be removed,
3   and the fabric includes identifications of partitions associated
4   with the registered addresses, said method further comprises:
5   matching both the address to be removed and the partition
6   identification in the logout command to the address and
7   associated partition identification registered in the fabric; and
8   sending the accept from the fabric to the channel adapter
9   only if both the address and partition identification in the
10 logout command match the address and associated partition
11 identification registered in the fabric.

1   8.   The method of claim 6 wherein the logout command includes a
2   source address of the partition which is making the request, and
3   the address to be removed is the source address.

1   9.   In a data processing network having a server with multiple
2   partitions, a fabric, and a channel adapter communicating between
3   the partitions and the fabric wherein each partition has an
4   assigned address, a apparatus for non-disruptively removing an
5   assigned address comprising:
6   means for sending a logout command from the channel adapter
7   to the fabric, the logout command including an address to be
8   removed;
9   means for checking the address to be removed with a table of
10 active addresses to determine if the address to be removed is an
11 active address;
12   means for changing the status of the address to be removed
13 from active to inactive; and
14   means for sending an accept response from the fabric to the
15 channel adapter indicating that the address to be removed has
16 been removed.

1 10. The apparatus of claim 9 wherein the said table associates a
2 partition identification with the address to be removed, said
3 apparatus further comprising;
4   means for including a partition identification in said
5 logout command;
6   means for checking the partition identification from said
7 logout command with the partition identification in said table
8 associated with the address to be removed; and
9   means for sending said accept response only when both the
10 address and the partition identification in the logout command
11 match with the address and associated partition identification in
12 said table.

1 11. The apparatus of claim 9 wherein said logout command
2 includes an address of the source of the logout command, and the
3 address to be removed in the same as the source address of the
4 logout command.

1 12. A data processing system comprising:
2   a server having multiple partitions;
3   a fabric;
4   a channel adapter communicating between the partitions and
5 the fabric via a channel adapter wherein each partition has an
6 assigned address;
7   said channel adapter sending a logout command to the fabric,
8 the logout command including an address to be removed;
9   a table in said fabric for registering addresses assigned to
10 said channel adapter, said fabric checking the address to be
11 removed with said table to determine if the address to be removed
12 is an active address;
13   said fabric changing the status of the address to be removed
14 from active to inactive; and

15   said fabric sending an accept response to the channel
16   adapter indicating that the address to be removed has been
17   removed.

1   13. The data processing system of claim 12 wherein the said
2   table associates a partition identification with the address to
3   be removed, said data processing system further comprising;
4   said channel adapter including a partition identification in
5   said logout command;
6   said fabric checking the partition identification from said
7   logout command with the partition identification in said table
8   associated with the address to be removed; and
9   said fabric sending said accept response only when both the
10   address and the partition identification in the logout command
11   match with the address and associated partition identification in
12   said table.

1   14. The data processing system of claim 12 wherein said logout
2   command includes an address of the source of the logout command,
3   and the address to be removed in the same as the source address
4   of the logout command.

1   15. A channel adapter non-disruptively removing one of multiple
2   addresses assigned to the channel adapter, comprising:
3   a port on said channel adapter sending from the channel
4   adapter to a fabric a logout command requesting the fabric to
5   unassign a given address; and
6   said port receiving from said fabric, a response indicating
7   the requested address is unassigned, said channel adapter
8   detecting an error if the response does not indicate the
9   requested address was successfully removed.

1 16. The method of claim 15 wherein the logout command includes a
2 source address of a partition making the request, and the source
3 address is the address being requested to be removed.

1 17. A apparatus non-disruptively removing one of multiple
2 addresses registered in a fabric, said apparatus comprising:
3   a port in said fabric receiving from a channel adapter, a
4 logout command requesting said fabric to unassign a given address
5 to be removed;
6   said fabric locating the address to be removed among the
7 addresses registered in said fabric;
8   said fabric changing the status of the address to be removed
9 from active to unassigned; and
10   said port sending an accept from said fabric to the channel
11 adapter indicating the requested address to be removed has been
12 unassigned.

1 18. The apparatus of claim 17 wherein the logout command
2 includes an identification of a partition having the address to
3 be removed, and the fabric includes identifications of partitions
4 associated with the registered addresses, and said apparatus
5 further comprises:
6   said fabric matching both the address to be removed and the
7 partition identification in the logout command to the address and
8 associated partition identification registered in said fabric;
9 and
10   said port sending the accept from the fabric to the channel
11 adapter only if both the address and partition identification in
12 the logout command match the address and associated partition
13 identification registered in the fabric.

1   19.   The method of claim 17 wherein the logout command includes a
2   source address of the partition which is making the request, and
3   the address to be removed is the source address.

1   20.   A program product usable with a data processing network
2   having a server with multiple partitions, a fabric, and a channel
3   adapter communicating between the partitions and the fabric
4   wherein each partition has an assigned address, said program
5   product comprising:
6   a computer readable medium having recorded thereon computer
7   readable program code performing a method of non-disruptively
8   removing an assigned address comprising:
9   sending a logout command from the channel adapter to the
10   fabric, the logout command including an address to be removed;
11   checking the address to be removed with a table of active
12   addresses to determine if the address to be removed is an active
13   address;
14   changing the status of the address to be removed from active
15   to inactive; and
16   sending an accept response from the fabric to the channel
17   adapter indicating that the address to be removed has been
18   removed.

1   21.   The program product of claim 20 wherein the said table
2   associates a partition identification with the address to be
3   removed, said method further comprising;
4   including a partition identification in said logout command;
5   checking the partition identification from said logout
6   command with the partition identification in said table
7   associated with the address to be removed; and
8   sending said accept response only when both the address and
9   the partition identification in the logout command match with the
10   address and associated partition identification in said table.

1 22. The program product of claim 20 wherein said logout command
2 includes an address of the source of the logout command, and the
3 address to be removed in the same as the source address of the
4 logout command.

1 23. A program product usable with a channel adapter for
2 non-disruptively removing one of multiple addresses assigned to
3 the channel adapter, said program product comprising:
4 a computer readable medium having recorded thereon computer
5 readable program code performing the method comprising:
6 sending from the channel adapter to a fabric a logout
7 command requesting the fabric to unassign a given address; and
8 receiving from said fabric, a response indicating the
9 requested address is unassigned, said channel adapter detecting
10 an error if the response does not indicate the requested address
11 was successfully removed.

1 24. The program product of claim 23 wherein the logout command
2 includes a source address of a partition making the request, and
3 the source address is the address being requested to be removed.

1 25. A program product usable with an apparatus for non-
2 disruptively removing one of multiple addresses registered in a
3 fabric, said program product comprising:
4 a computer readable medium having recorded thereon computer
5 readable program code performing the method comprising:
6 receiving by the fabric from a channel adapter, a logout
7 command requesting the fabric to unassign a given address to be
8 removed;
9 locating the address to be removed among the addresses
10 registered in the fabric;
11 changing in the fabric, the status of the address to be
12 removed from active to unassigned; and

13   sending an accept from the fabric to the channel adapter
14 indicating the requested address to be removed has been
15 unassigned.

1   26.   The program product of claim 25 wherein the logout command
2   includes an identification of a partition having the address to
3   be removed, and the fabric includes identifications of partitions
4   associated with the registered addresses, and said method further
5   comprises:
6   matching both the address to be removed and the partition
7   identification in the logout command to the address and
8   associated partition identification registered in the fabric; and
9   sending the accept from the fabric to the channel adapter
10 only if both the address and partition identification in the
11 logout command match the address and associated partition
12 identification registered in the fabric.

1   27.   The program product of claim 25 wherein the logout command
2   includes a source address of the partition which is making the
3   request, and the address to be removed is the source address.